

Listing of the Claims

1. (Currently Amended) A method for the computer-assisted visualization of a three-dimensional anatomical object, comprising the following method steps:
 - a) recording two or more diagnostic image data records of the object wherein at least one image data record comprises morphological image information of the anatomical object and at least one further image data record comprises functional image information relating to the anatomical object;
 - b) defining an imaging specification for imaging the image data onto a two-dimensional display plane, the definition of the imaging specification involving the identification of anatomical features of the object in at least one of the image data records and the determination of an object volume delimited by a curved surface in which the anatomical features of the object are contained~~wherein in order to define the imaging specification anatomical features of the object are identified in at least one of the image data records;~~
 - c) calculating a combined two-dimensional representation by imaging the two or more image data records according to the previously defined imaging specification onto the common display plane wherein a projection of the image information of the data records that is contained in the object volume is calculated during the calculation of the two-dimensional representation.
2. (Cancelled) A method as claimed in claim 1, wherein in order to define the imaging specification an object volume delimited by a curved surface is determined in which the anatomical features of the object that are to be identified are contained.
3. (Cancelled) A method as claimed in claim 2, wherein according to the imaging specification a projection of the image information of the data records that is contained in the object volume is calculated during the calculation of the two-dimensional representation.
4. (Currently Amended) A method as claimed in claim ~~3~~1, wherein in order to calculate the two-dimensional representation Cartesian coordinates within the display plane are assigned to non-Cartesian surface coordinates of the object volume.

5. (Cancelled) A method as claimed in claim 1, wherein at least one image data record comprises morphological image information of the anatomical object and at least one further image data record comprises functional image information relating to the anatomical object.

6. (Currently Amended) A method as claimed in claim 5, wherein the functional image information is obtained by evaluating temporal sequences of morphological image data of the anatomical object.

7. (Previously Presented) A method as claimed in claim 1, wherein at least one of the image data records comprises at least one slice image of the anatomical object.

8. (Previously Presented) A method as claimed in claim 1, wherein the image data records are recorded by means of computer tomography, magnetic resonance or ultrasound.

9. (Previously Presented) A method as claimed in claim 1, wherein the image data records are recorded using different imaging modes.

10. (Cancelled) A diagnostic imaging device with recording means for recording three-dimensional image data records of an anatomical object, and with computer means for visualizing the image data, wherein the computer means have program control, by means of which a method as claimed in claim 1 can be carried out.

11. (Cancelled) A computer program for a diagnostic imaging device, wherein a method as claimed in claim 1 is implemented by the computer program on the computer means of the imaging device.